



TENNESSEE DEPARTMENT OF  
**EDUCATION**  
DIVISION OF CAREER AND TECHNICAL EDUCATION

The revised Programs of Study and corresponding courses are outlined below by Career Cluster. For more information on the specific courses, please visit our career cluster webpage at [http://www.tn.gov/education/cte/Career\\_Clusters/Career\\_Clusters.shtml](http://www.tn.gov/education/cte/Career_Clusters/Career_Clusters.shtml).

**Williamson County Schools**  
**CCTE Programs of Study**  
**2018-2019**

This guide indicates Programs of Study (POS) being offered in WCS as well as certifications/credentials that students may obtain through each POS when available. Each POS is aligned with one of the state approved 16 Career Clusters.

Notes:

- \* Indicates a dual credit opportunity
- \*\* Indicates dual enrollment opportunity
- Underlined courses qualify as a Capstone class
- **SPOS** indicates Special Program of Study
- **CTE courses satisfying additional graduation requirements**
- **WBL may substitute for a Level 3 or Level 4 course in any Program of Study and complete a student's elective focus with prior approval**

# Advanced Manufacturing

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Mechatronics</b> <b>CSCC AiIT</b> <b>A.A.S</b>  <b>Fairview</b>	Principles of Manufacturing 5922  NIMS Industry Certification And CPT Industry Certification	Digital Electronics 5925	Mechatronics I 6156 * Dual Credit Opportunity through CSCC or Mechatronics Dual Enrollment (CSCC) 4063 **  Level I Siemens Certified Mechatronics System Assistant Industry Certification	Mechatronics II 6157 * Dual Credit Opportunity through CSCC or Mechatronics Dual Enrollment (CSCC) 4063 ** or <u>Manufacturing Practicum</u> 5926	NIMS Industry Certification  CPT Industry Certification  Level I Siemens Certified Mechatronics System Assistant Industry Certification	SkillsUSA or TSA	** See specific course sequence ending in CSCC AiIT A.A.S Degree

# Agriculture, Food, & Natural Resources

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Veterinary and Animal Science</b>  <b>Page</b>	Agriscience 5957  <small>Lab Science and elective focus credit <u>only</u> for students completing a Veterinary and Animal Science or Horticulture Science Program of Studies</small>	Small Animal Science 5958	Large Animal Science 6116	Veterinary Science 5961  <small>Lab Science and elective focus credit <u>only</u> for students completing a Veterinary Animal Science Program of Studies</small>  Animal Science Industry Certification	Animal Science Industry Certification	FFA	
<b>Horticulture Science</b>  <b>Fairview</b>	Agriscience 5957  <small>Lab Science and elective focus credit <u>only</u> for students completing a Veterinary and Animal Science or Horticulture Science Program of Studies</small>	Principles of Plant Sciences and Hydroculture 6119	Greenhouse Management 5954 * <small>Dual Credit Opportunity through MTSU</small>	Landscaping and Turf Science 5951  Commercial Pesticide Industry Certification	Commercial Pesticide Industry Certification	FFA	
<b>Horticulture Science</b>  <b>Nolensville</b>	Agriscience 5957  <small>Lab Science and elective focus credit <u>only</u> for students completing a Veterinary and Animal Science or Horticulture Science Program of Studies</small>	Principles of Plant Sciences and Hydroculture 6119	Greenhouse Management 5954 * <small>Dual Credit Opportunity through MTSU</small> Or AP Environmental Science (3236)	AP Environmental Science (3236) Or <u>Work-Based Learning: Career Practicum</u> 6105	Commercial Pesticide Industry Certification	FFA	

# Architecture & Construction

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Architecture, Engineering and Design</b>  <b>Centennial</b> <b>Franklin</b> <b>Independence</b> <b>Ravenwood</b>	Architectural & Engineering Design I 6037	Architectural & Engineering Design II 6039	Architectural & Engineering Design III 5927 ** <small>**Engineering 2100 at CHS,RHS,PHS &amp; IHS (MTSU)            DE Course Code 4071</small>	<u>Honors Engineering Practicum:</u> Engineering Your World 6141 RHS only ** <small>**Engineering 1100 at RHS (MTSU)            DE Course Code 4071</small>  Geographic Information Systems 6142 CHS only	AutoCAD Certified User	SkillsUSA Or TSA	
<b>Structural Systems</b>  <b>Fairview</b>	Fundamentals of Construction 6073  NCCER Core Curriculum and OSHA 10 Industry Certifications	Structural Systems I 6164  NCCER Carpentry Level I Industry Certification	Structural Systems II 6165  NCCER Carpentry Level II and OSHA 30 Construction Industry Certifications	<u>Construction Practicum</u> <u>6160</u>	NCCER Core Curriculum  OSHA 10 Industry Certifications  NCCER Carpentry Level I Industry Certification  NCCER Carpentry Level II  OSHA 30 Construction Industry Certifications	SkillsUSA	

# Arts, Audio/Visual Technology, & Communications

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Digital Arts and Design</b>  <b>Franklin Independence Renaissance Summit</b>	Digital Arts and Design I 6084  <i>Fine Art and elective focus credit only for students completing a Digital Arts and Design Program of Studies</i>	Digital Arts and Design II 6086	Digital Arts and Design III 6087 ** **EMC1050 at IHS & SHS (MTSU) DE Course Code 4077  * Dual Credit Opportunity through Nossi  AP Portfolio Submission for possible AP credit	Digital Arts and Design III 6087 ** **EMC1050 at IHS & SHS (MTSU) DE Course Code 4077  <u>Applied Arts Practicum</u> 6158	Adobe Certified Associate - Creative Suite  Apple Certified Pro  Adobe Certified Associate - Premier Pro	SkillsUSA	
<b>SPOS Music Industry Audio Production</b>  <b>Renaissance</b>	Music Industry Audio Production I 6042 23021	Music Industry Audio Production II 6042 23022	Music Industry Audio Production III 6042 23023		ProTools	SkillsUSA	
<b>Television and Film Production / AV Production</b>  <b>Brentwood Centennial Fairview Franklin Independence Page Nolensville Ravenwood Summit</b>	Television and Film Production / AV Production I 6049	Television and Film Production / AV Production II 6050	**Television and Film Production / AV Production III 6083  **EMC 1060 at BHS, CHS, FHS, FavHS, IHS, PHS, RHS & SHS (MTSU) DE Course Code 4078			SkillsUSA Or TSA	

# Business Management & Administration

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Business Management</b>  <b>Brentwood</b>	Computer Applications 5891 * Dual Credit Opportunity through CSCC	Accounting I 5910 * Dual Credit Opportunity through CSCC	Business Management 5889 ** **BCED 1400 at BHS (MTSU) DE Course Code 4083	Virtual Enterprise International 5900 Economics and elective focus credit <u>only</u> for students completing a Business Management & Administration, or Marketing Management Program of Studies  or <u>Business &amp; Entrepreneurship Practicum</u> 6159		DECA	

# Education & Training

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Teaching as a Profession K-12</b>  <b>Centennial Fairview</b>	Fundamentals of Education 6123 (Not at CHS)	Teaching as a Profession I 6010	Teaching as a Profession II 6125	Teaching as a Profession III 6126 or <u>Work Based Learning / Internship</u> 6105		FCCLA	
<b>Early Childhood Education Careers</b>  <b>Franklin Independence Summit</b>	Early Childhood Education Careers I 6015	Early Childhood Education Careers II 6016	Early Childhood Education Careers III 6017  CDA Industry Certification	Teaching as a Profession I 6010	TECTA Orientation/ Certification  CDA Industry Certification	FCCLA	

# Finance

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Accounting</b> <b>Ravenwood</b>	Accounting I 5910 * Dual Credit Opportunity through CSCC	Accounting II 5911	Statistics 3136 Or AP Statistics 3129			DECA	



# Hospitality & Tourism

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Culinary Arts</b>  <b>Franklin Nolensville Summit</b>	Culinary Arts I 5979	Culinary Arts II 5980	Culinary Arts III 5981 The Guest Experience/Intro to Hospitality Management <small>DE Course MTSU</small> ServSafe Food Manager Industry Certification		ServSafe Food Manager Industry Certification ABC Card ProStart Serve-Safe	FCCLA	

# Human Services

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Cosmetology</b>  <b>Centennial</b>	*Cosmetology I 5983  Transfer Hours to Empire Beauty, Hair Academy Franklin, Georgia Career Institute, Paul Mitchell	*Cosmetology II 5986  Transfer Hours to Empire Beauty, Hair Academy Franklin, Georgia Career Institute, Paul Mitchell	*Cosmetology III 5984  Transfer Hours to Empire Beauty, Hair Academy Franklin, Georgia Career Institute, Paul Mitchell	*Cosmetology IV 6167  Transfer Hours to Empire Beauty, Hair Academy Franklin, Georgia Career Institute, Paul Mitchell  TN Board of Cosmetology & Barbering TN Master Barber 1010 Industry Certification	Accrue state board hours for post-secondary credit  TN Board of Cosmetology & Barbering TN Master Barber 1010 Industry Certification	SkillsUSA	
<b>Sports Health and Nutrition Science</b>  <b>Independence</b>	Nutrition Across the Lifespan 6005	Nutrition Science and Diet Therapy 6007  Tennessee Specific Industry Certification – Dietetics and Nutrition Industry Certification	<u>Human Services Practicum</u> 6138		Tennessee Specific Industry Certification – Dietetics and Nutrition Industry Certification	FCCLA	

# Information Technology (page 1 of 3)

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Web Design &amp; Mobile Technologies Tech Certificate</b>  <b>Renaissance Centennial</b>	Web Foundations 6100  * Dual Credit Opportunity through CSCC	Coding I 6098  * Dual Credit Opportunity through CSCC	Fall Semester CITC 2361 Adv. Web Design & Development  DE Opportunity through CSCC  Spring Semester CITC 1373 IOS APP Development  DE Opportunity through CSCC	Fall Semester CITC 1372 Android APP Development  Spring Semester CITC 2372 Mobile Security  DE Opportunity through CSCC		SkillsUSA	** See specific course sequence ending in CSCC Web Design & Mobile Technologies Tech Certificate
<b>Coding</b>  <b>Ravenwood</b>	Coding I 6098  * Dual Credit Opportunity through CSCC	Coding II 6099  Comp TIA A+ and Microsoft Technology Associate Software Development Industry Certification  **INFS 2600 at BHS, FHS, IHS, RHS (MTSU) DE Course Code 4113	AP Computer Science Principles 3634 Or AP Computer Science 3635  *AP computer Science 3635 - Math course, AP focus credit and information technology focus credit	AP Computer Science Principles 3634 Or AP Computer Science 3635  *AP computer Science 3635 - Math course, AP focus credit and information technology focus credit or <u>Coding Practicum/ Game Programming</u> 5908	Comp TIA A+  Microsoft Technology Associate Software Development Industry Certification	SkillsUSA	
<b>Coding/ Autonomous Vehicles</b>  <b>Brentwood Franklin Independence</b>	Coding I 6098  * Dual Credit Opportunity through CSCC	Honors Coding Practicum I/ Autonomous Vehicles 5908	Honors Coding Practicum II/ Autonomous Vehicles 5908	AP Computer Science 3635  *AP computer Science 3635 - Math course, AP focus credit and information technology focus credit		SkillsUSA	

# Information Technology (page 2 of 3)

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Coding</b>  <b>Independence Page</b>	Coding I 6098  * Dual Credit Opportunity through CSCC	Coding II 6099  Comp TIA A+ and Microsoft Technology Associate Software Development Industry Certification  **INFS 2600 at BHS, FHS, IHS, PHS, RHS (MTSU) DE Course Code 4113	AP Computer Science Principles 3634 Or AP Computer Science 3635  *AP computer Science 3635 - Math course, AP focus credit and information technology focus credit	AP Computer Science 3635  *AP computer Science 3635 - Math course, AP focus credit and information technology focus credit Or AP Computer Science Principles 3634	Comp TIA A+  Microsoft Technology Associate Software Development Industry Certification	SkillsUSA Or TSA	
<b>Coding</b>  <b>Brentwood Summit</b>	Computer Science Foundations 6095  CompTIA IT Fundamentals Industry Certification	Coding I 6098  * Dual Credit Opportunity through CSCC	Coding II 6099  Comp TIA A+ and Microsoft Technology Associate Software Development Industry Certification  **INFS 2600 at BHS, FHS, IHS, RHS (MTSU) DE Course Code 4113	AP Computer Science 3635  *AP computer Science 3635 - Math course, AP focus credit and information technology focus credit Or AP Computer Science Principles 3634 Or <u>Honors Programming and Software Development Practicum 5908</u>	CompTIA IT Fundamentals Industry Certification  Comp TIA A+  Microsoft Technology Associate Software Development Industry Certification	SkillsUSA	
<b>Coding</b>  <b>Brentwood</b>	Coding I 6098  * Dual Credit Opportunity through CSCC	AP Computer Science Principles 3634	Coding II 6099  Comp TIA A+ and Microsoft Technology Associate Software Development Industry Certification  **INFS 2600 at BHS, FHS, IHS, RHS (MTSU) DE Course Code 4113	AP Computer Science 3635  *AP computer Science 3635 - Math course, AP focus credit and information technology focus credit	Comp TIA A+  Microsoft Technology Associate Software Development Industry Certification	SkillsUSA	

# Information Technology (page 3 of 3)

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Coding</b>  <b>Brentwood</b>	AP Computer Science Principles 3634	Coding II 6099  Comp TIA A+ and Microsoft Technology Associate Software Development Industry Certification  <small>**INFS 2600 at BHS, FHS, IHS, RHS (MTSU) DE Course Code 4113</small>	AP Computer Science 3635  <small>*AP computer Science 3635 - Math course, AP focus credit and information technology focus credit</small>	<u>Honors Programing and Software Development Practicum</u> 5908	Comp TIA A+ Microsoft Technology Associate Software Development Industry Certification	SkillsUSA	

# Law, Public Safety, Corrections, & Security

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Criminal Justice</b> <b>(Law Enforcement Services)</b>  <b>Franklin Independence Ravenwood</b>	Criminal Justice I 5987	*Criminal Justice II 5988 ** <small>CJA 1100, 2200, 2600            DE Course Code 4117            FHS &amp; RHS (MTSU)</small>	Criminal Justice III: Investigation 5989 ** <small>CJA 1100, 2200, 2600 DE            Course Code 4117            FHS &amp; RHS (MTSU)</small>		Dispatch & Security Certification for Emergency Telecommunication  Unarmed Security Guard	SkillsUSA	
<b>SPOS Criminal Justice</b> <b>(Law Enforcement Services)</b>  <b>Centennial</b>	Criminal Justice I 5987	*Criminal Justice II 5988	Criminal Justice III: Investigation 5989 ** Or Networking I <small>DE Course Code 4114</small> & Cyber Security <small>DE Course Code 4119</small> ** <small>(DE CSCC)</small>	Criminal Justice III: Investigation 5989 ** Or Networking I <small>DE Course Code 4114</small> & Cyber Security <small>DE Course Code 4119</small> ** <small>(DE CSCC)</small>	Dispatch & Security Certification for Emergency Telecommunication  Unarmed Security Guard	SkillsUSA	

# Marketing (page 1 of 2)

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Marketing Management</b>  <b>Centennial</b>	Marketing and Management I Principles 5931 * Dual Credit Opportunity through CSCC  Economics credit for students completing any CTE Program of Study	Marketing and Management Principles II: Advanced Strategies 5932 * Dual Credit Opportunity through CSCC	Event Planning and Management 6168	Entrepreneurship 5934 * Dual Credit Opportunity through CSCC  Economics credit for students completing any CTE Program of Study		DECA	
<b>Marketing Management</b>  <b>Franklin</b>	Marketing and Management I Principles 5931 * Dual Credit Opportunity through CSCC  Economics credit for students completing any CTE Program of Study	Event Planning and Management 6168	Entrepreneurship 5934 * Dual Credit Opportunity through CSCC  Economics credit for students completing any CTE Program of Study	<u>Work-Based Learning: Career Practicum</u> 6105		DECA	
<b>Marketing Management</b>  <b>Independence</b>	Marketing and Management I Principles 5931 * Dual Credit Opportunity through CSCC  Economics credit for students completing any CTE Program of Study	Marketing and Management Principles II: Advanced Strategies 5932 * Dual Credit Opportunity through CSCC	Retail Operations 5938 Or Entrepreneurship 5934 * Dual Credit Opportunity through CSCC  Economics credit for students completing any CTE Program of Study			DECA	
<b>Marketing Management</b>  <b>Page Summit</b>	Marketing and Management I Principles 5931 * Dual Credit Opportunity through CSCC  Economics credit for students completing any CTE Program of Study	Marketing and Management Principles II: Advanced Strategies 5932 * Dual Credit Opportunity through CSCC	Advertising & Public Relations 5936	Entrepreneurship 5934 * Dual Credit Opportunity through CSCC  Economics credit for students completing any CTE Program of Study		DECA	

# Marketing (page 2 of 2)

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<p><b>Sports and Entertainment Marketing/ Entrepreneurship</b></p> <p><b>Ravenwood</b></p>	<p>Marketing and Management I Principles 5931</p> <p>*</p> <p>Dual Credit Opportunity through CSCC</p> <p>Economics credit for students completing any CTE Program of Study</p>	<p>Entrepreneurship 5934</p> <p>*</p> <p>Dual Credit Opportunity through CSCC</p> <p>Economics credit for students completing any CTE Program of Study</p>	<p><u>Sports and Entertainment Marketing/Business &amp; Entrepreneurship Practicum</u> 6159</p>	<p>Event Planning &amp; Management 6168</p>		<p>DECA</p>	
<p><b>Entrepreneurship</b></p> <p><b>Nolensville</b></p>	<p>Marketing and Management I Principles 5931</p> <p>*</p> <p>Dual Credit Opportunity through CSCC</p> <p>Economics credit for students completing any CTE Program of Study</p>	<p>Entrepreneurship 5934</p> <p>*</p> <p>Dual Credit Opportunity through CSCC</p> <p>Economics credit for students completing any CTE Program of Study</p>	<p>Virtual Enterprise International 5900</p> <p>*</p> <p>Dual Credit Opportunity through CSCC</p> <p>Economics credit for students completing any CTE Program of Study</p>			<p>DECA</p>	
<p><b>Entrepreneurship</b></p> <p><b>Franklin</b></p>	<p>Marketing and Management I Principles 5931</p> <p>*</p> <p>Dual Credit Opportunity through CSCC</p> <p>Economics credit for students completing any CTE Program of Study</p>	<p>Entrepreneurship 5934</p> <p>*</p> <p>Dual Credit Opportunity through CSCC</p> <p>Economics credit for students completing any CTE Program of Study</p>	<p><u>Work-Based Learning: Career Practicum</u> 6105</p>			<p>DECA</p>	
<p><b>Entrepreneurship</b></p> <p><b>Brentwood</b></p>	<p>Marketing and Management I Principles 5931</p> <p>*</p> <p>Dual Credit Opportunity through CSCC</p> <p>Economics credit for students completing any CTE Program of Study</p>	<p>Entrepreneurship 5934</p> <p>*</p> <p>Dual Credit Opportunity through CSCC</p> <p>Economics credit for students completing any CTE Program of Study</p>	<p><u>Business &amp; Entrepreneurship Practicum</u> 6159</p>			<p>DECA</p>	





# Medical Sciences (page 1 of 2)

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Diagnostic Services/ Pre-Med</b>  <b>Franklin Page</b>	Health Science Education 5998	Honors Anatomy and Physiology 3251  <i>Lab Science and elective focus credit only for students completing a Medical Science Program of Studies</i>	Diagnostic Medicine 5994	<u>Clinical Internship</u> 5993  Cardiovascular Services 6131 PHS  Certified EKG Technician Industry Certification	Certified EKG Technician Industry Certification	HOSA	
<b>Diagnostic Services/ Pre-Med</b>  <b>Independence</b>	Health Science Education 5998	Diagnostic Medicine 5994	Honors Anatomy and Physiology 3251  <i>Lab Science and elective focus credit only for students completing a Medical Science Program of Studies</i>	<u>Honors Nursing Education</u> 6000  Certified Nursing Assistant Industry Certification  or <u>Clinical Internship</u> 5993	Certified Nursing Assistant Industry Certification	HOSA	
<b>Emergency Services</b>  <b>Fairview Page Ravenwood</b>	Health Science Education 5998	Honors Anatomy & Physiology 5991 FavHS  <i>Lab Science and elective focus credit only for students completing a Medical Science Program of Studies</i>  Honors Anatomy & Physiology 3251 PHS & RHS  <i>Lab Science and elective focus credit only for students completing a Medical Science Program of Studies</i>	Honors Emergency Medical Services 5995  Emergency Medical Responder Industry Certification	<u>Clinical Internship</u> 5993	Emergency Medical Responder Industry Certification	HOSA	
<b>SPOS Pre-Med / Biomedical Science (PLTW)</b>  <b>Ravenwood</b>	Honors Principles of Biomedical Science 23101	Honors Anatomy and Physiology 3251  <i>Lab Science and elective focus credit only for students completing a Medical Science Program of Studies</i> or Honors Human Body Systems 23102  <i>Lab Science and elective focus credit only for students completing the PLTW Biomedical Science Program of Studies</i>	AP Biology 3217 or Honors Medical Interventions	Honors Biomedical Innovations or Honors Medical Interventions		HOSA	AP Chemistry 3225  AP Physics 3238

# Medical Sciences (page 2 of 2)

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Therapeutic Clinical Services</b>  <b>Centennial</b>	Health Science Education 5998	Honors Medical Therapeutics 5999  Certified Clinical Medical Assistant Industry Certification (if Medical Therapeutics is Followed by Clinical Internship)	Pharmacological Science 6133  Certified Pharmacy Tech Industry Certification	Honors Anatomy and Physiology 3251  Lab Science and elective focus credit only for students completing a Medical Science Program of Studies  Or <u>Clinical Internship 5993</u>	Certified Clinical Medical Assistant Industry Certification  Certified Pharmacy Tech Industry Certification	HOSA	
<b>Nursing (Therapeutic Nursing Services)</b>  <b>Centennial</b> <b>Nolensville</b> <b>Page</b> <b>Ravenwood</b>	Health Science Education 5998	Honors Medical Therapeutics 5999  Certified Clinical Medical Assistant Industry Certification (if Medical Therapeutics is Followed by Clinical Internship)	Honors Anatomy and Physiology 3251  Lab Science and elective focus credit only for students completing a Medical Science Program of Studies  or <u>Honors Nursing Education 6000</u>  Certified Nursing Assistant Industry Certification	<u>Clinical Internship 5993</u>  Or <u>Honors Nursing Education 6000</u>  Certified Nursing Assistant Industry Certification	Certified Clinical Medical Assistant Industry Certification  Certified Nursing Assistant Industry Certification	HOSA	
<b>Sport and Human Performance</b>  <b>Independence</b> <b>Fairview</b> <b>Nolensville</b> <b>Summit</b>	Health Science Education 5998	Honors Rehabilitation Careers 5990	Honors Anatomy and Physiology 5991 FavHS  Lab Science and elective focus credit only for students completing a Medical Science Program of Studies  Honors Anatomy and Physiology 3251 IHS  Lab Science and elective focus credit only for students completing a Medical Science Program of Studies	<u>Clinical Internship 5993</u> IHS & SHS  Exercise Science 6170 FavHS  Certified Personal Trainer Industry Certification (if Exercise Science is Followed by Clinical Internship)	Certified Personal Trainer Industry Certification	HOSA	

# Science, Technology, Engineering, & Mathematics

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>STEM Research: Mechanical Engineering</b>  <b>Brentwood Franklin</b>	Coding I 6098	Honors Engineering Through Service Learning 5921 Or AP Computer Science 3635	AP Physics 3238	Honors STEM Research 6147		TSA	AP Environmental Science 3236
<b>STEM Research: Chemical Engineering</b>  <b>Brentwood Franklin</b>	Coding I 6098	Honors Engineering Through Service Learning 5921 Or AP Computer Science 3635	AP Chemistry 3225	Honors STEM Research 6147		TSA	AP Environmental Science 3236
<b>STEM Research: Biomedical Engineering</b>  <b>Brentwood Franklin</b>	Coding I 6098	Honors Engineering Through Service Learning 5921 Or AP Computer Science 3635	AP Biology 3217	Honors STEM Research 6147		TSA	AP Environmental Science 3236
<b>Engineering by Design</b>  <b>Page</b>	Foundations of Technology (EBD) 5917	Technological Design (EBD) 5885	<u>Work-Based Learning: Career Practicum</u> 6105		Autodesk Certified User	TSA	
<b>Engineering Project Lead the Way</b>  <b>Page Summit</b>	Honors Introduction to Engineering Design (PLTW) 6054	Honors Principles of Engineering (PLTW) 6052 <i>Lab science and elective focus credit only for students completing an Engineering Project Lead the Way Program of Studies</i>	Honors Civil Engineering (PLTW) 6056 and Honors Digital Electronics (PLTW) 6053	Honors Engineering Design and Development (PLTW) 6059 ** ENGR2100 (MTSU) DE Course Code 4071	Autodesk Certified User	SkillsUSA or TSA	
<b>SPOS Engineering and Unmanned Aerial Systems (UAS)</b>  <b>Nolensville</b>	Principles of Engineering Technology 5924	Engineering Design I 6139	Engineering Design II 6140 Or Honors Unmanned Aerial System 3153 <i>Dual Credit Opportunity through MTSU</i>	<u>Work-Based Learning: Career Practicum related to Engineering and Unmanned Aerial Systems</u> 6105	Remote Pilot Certification	****	

# Transportation, Distribution, & Logistics

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<p><b>Automotive Collision Repair</b></p> <p><b>Franklin</b></p>	<p>Introduction to Collision Repair 6172</p>	<p>Collision Repair: Non-Structural 6062</p> <p>I-CAR Refinish Technician ProLevel 1 or I-CAR Non-Structural Technician ProLevel 1 and Automotive Service Excellence Student Certification: Nonstructural Analysis/Repair Industry Certification</p>	<p>Collision Repair: Painting &amp; Refinishing 6063</p> <p>Automotive Service Excellence Student Certification: Paining and Refinishing Industry Certification</p>	<p>Collision Repair: Damage Analysis, Estimating, &amp; Customer Service 6149</p>	<p>I-CAR Refinish Technician ProLevel 1</p> <p>I-CAR Non-Structural Technician ProLevel 1</p> <p>Automotive Service Excellence Student Certification: Nonstructural Analysis/Repair Industry Certification</p> <p>Automotive Service Excellence Student Certification: Paining and Refinishing Industry Certification</p>	<p>SkillsUSA</p>	<p>Service King Internships at level 3 and level 4</p>

# Middle School

Program of Study	Level 1	Level 2	Level 3	Level 4	Credential / Certification	CTSO	Recommended Elective(s), not approved for Elective Focus
<b>Engineering</b>  <b>Spring Station Middle</b>	Exploring Engineering (EP) 0982						
<b>STEM</b>  <b>Fairview Middle</b>	Exploring Technology (EBD) 6047	Inventions and Innovations (EBD) 0782	Technological Systems (EBD) 0882			TSA	Principles of Manufacturing 5922
<b>TV/Film</b>  <b>BMS SMS WMS</b>	TV/Film						
<b>Discovery</b>  <b>GMS</b>	PBL						

## ASSOCIATE DEGREE CREDITS TEMPLATE

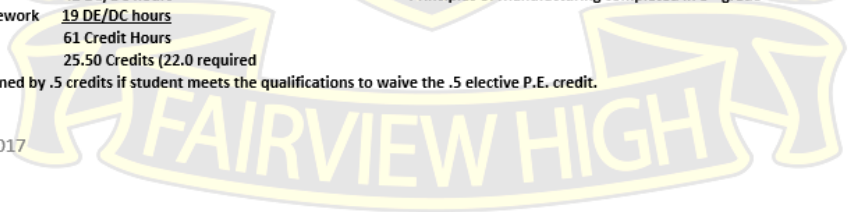
### + Career and Technical Pathway

Subjects/Credits Needed	Ninth Grade 6.0 Credits	Tenth Grade 6.0 Credits	Eleventh Grade 6.5 Credits	Twelfth Grade 7.0 Credits
<i>English</i> 4.0	English I	English II	English III	English IV/ <u>1010 (DE – 3 hrs)</u>
<i>Math</i> 4.0	Algebra I	Geometry	Algebra II	WCS Pre-Calculus – State Dual Credit (3 hrs.)
<i>Science</i> 3.0	Biology I	Chemistry or Physics	Physical Science CSCC Dual Credit (4 hrs)	N/A
<i>Social Studies</i> 3.5*	World History		U.S. History	<u>Economics (DE – 3 hrs)</u> /U.S. Government
<i>World Language</i> 2.0	World Language I	World Language II		
<i>Fine Arts</i> 1.0	Study Hall	Study Hall		FHS Fine Art/CSCC Fine Art (DE – 3 Sem. Hrs.)
<i>Physical Ed</i> 1.5	Wellness	P.E./*Personal Finance	<u>Mechatronics (DE – 6 hrs)</u>	<u>Computer Apps/Mechatronics (DE – 6 hrs)</u>
<i>Electives</i> 4.0	Digital Electronics	<u>Mechatronics (Dual Credit – 6 hrs)</u>	<u>Mechatronics (DE – 6 hrs)</u>	<u>Mechatronics (DE – 6 hrs)</u>
<i>Electives</i> 3.0		<u>Mechatronics (Dual Credit – 6 hrs)</u>	Study Hall/ <u>Mechatronics Internship (DE – 3 hrs.)</u>	<u>Mechatronics/Mechatronics Internship (DE – 6hrs)</u>

**Notes:** Mechatronics 42 DE/DC hours  
 Additional college coursework 19 DE/DC hours  
 Total College Credit 61 Credit Hours  
 Total High School Credit 25.50 Credits (22.0 required)  
 Class load could be lessened by .5 credits if student meets the qualifications to waive the .5 elective P.E. credit.

Principles of Manufacturing completed in 8<sup>th</sup> grade

Updated February 2017



# WIT Academy

## Web Design and Mobile Technologies Technical Certificate Centennial High School/Columbia State Community College

\*Sequence of Courses for students pursuing a *Web Design and Mobile Technologies Technical Certificate* through Columbia State Community College

\*The *Web Design and Mobile Technologies Technical Certificate* is designed to prepare graduates for entry level positions as Software Developers, Applications, and Web Developers

9<sup>th</sup> Grade – Coding I – CITC 1301 Introduction to P&L - CSCC Dual Credit – 3 hours

10<sup>th</sup> Grade – Web Foundations – CITC 1300 Beginning HTML and CSS - CSCC Dual Credit – 3 hours

11<sup>th</sup> Grade/12<sup>th</sup> Grade – CSCC Dual Enrollment Course Options – 1 course per semester

- CITC 2371 Mobil Networks and Communications – CSCC Dual Enrollment - 3 hours
- CITC 2361 Adv Web Design and Development – CSCC Dual Enrollment – 3 hours
- CITC 2372 Mobile Security – CSCC Dual Enrollment – 3 hours

Students will choose 1 of the following courses:

- CITC 1371 Windows Mobile App Development – CSCC Dual Enrollment – 3 hours
- CITC 1372 Android App Development – CSCC Dual Enrollment – 3 hours
- CITC 1373 iOS App Development – CSCC Dual Enrollment – 3 hours

Total Credit Hours - 18



# Renaissance HS

## Web Design and Mobile Technologies Technical Certificate Renaissance High School/Columbia State Community College

\*Sequence of Courses for students pursuing a *Web Design and Mobile Technologies Technical Certificate* through Columbia State Community College

\*The *Web Design and Mobile Technologies Technical Certificate* is designed to prepare graduates for entry level positions as Software Developers, Applications, and Web Developers

9<sup>th</sup> Grade – Web Foundations – CITC 1300 Beginning HTML and CSS - CSCC Dual Credit – 3 hours

10<sup>th</sup> Grade – Coding ↓ – CITC 1301 Introduction to P&L - CSCC Dual Credit – 3 hours

11<sup>th</sup> Grade/12<sup>th</sup> Grade – CSCC Dual Enrollment Course Options – 1 course per semester

- CITC 2361 Adv Web Design and Development – CSCC Dual Enrollment – 3 hours
- CITC 2371 Mobil Networks and Communications – CSCC Dual Enrollment - 3 hours

Students will choose 1 of the following courses:

- CITC 1373 iOS App Development – CSCC Dual Enrollment – 3 hours
- CITC 2372 Mobile Security| – CSCC Dual Enrollment – 3 hours

Total Credit Hours - 18

**Program and Contact Information:**

**Columbia State Community College**  
 Dearl Lampley  
 Dean Science/Technology/Math  
[dlampley@columbiastate.edu](mailto:dlampley@columbiastate.edu)

**Michael Sztapka**  
 Enrollment Recruiter  
 Columbia State Community College  
 Williamson County Campus  
[msztapka@columbiastate.edu](mailto:msztapka@columbiastate.edu)

**Williamson County Schools**  
 Rebecca Collins  
 Career Counselor,  
 College, Career & Technical Education  
[rebeccac@wcs.edu](mailto:rebeccac@wcs.edu)

**David L. Allen**  
 Executive Director,  
 College, Career & Technical Education  
[davida1@wcs.edu](mailto:davida1@wcs.edu)

**Centennial High School**  
 Counseling Center  
 (615)472-4282

**What does the course load look like?**

Columbia State Community College Course	Williamson County Schools Course/CLEP	Year
BUSN 1305 Introduction to Business	<b>Marketing &amp; Management I - Fall</b> Dual Credit	Sophomore
INFS 1010 Computer Applications	<b>Marketing &amp; Management I - Spring</b> Dual Credit	Sophomore
BUSN 1380 Supervisory Management	<b>Marketing &amp; Management II - Spring</b> Dual Enrollment or Dual Credit College Board CLEP - Principles of Management (50+)	Junior
BUSN 1310 Business Communication	Dual Enrollment	Junior
BUSN 1350 Sales and Service	<b>Entrepreneurship/ Retail Operations/</b> Dual Enrollment or Dual Credit	Junior or senior
BUSN 2370 Legal Environment of Business	Dual Enrollment	Junior or senior
ACCT 1010* Principles of Accounting I	Dual Enrollment	Junior or senior
BUSN 2380 Principles of Marketing	<b>Marketing &amp; Management II - Fall</b> Dual Enrollment or Dual Credit College Board CLEP - Principles of Marketing (50+)	Junior or senior
BUSN 1330 Entrepreneurship	Dual Credit	Junior or senior

# Business Technical Certificate



## Franklin High School/Service King Collision Repair Summer Program

### WHAT

Franklin High School and Service King Collision Repair are offering all Williamson County School's rising 10<sup>th</sup> graders and above the opportunity to take summer coursework in automotive collision repair. Students will have the opportunity to earn up to 2 high school credits and hours toward their Inter-Industry Conference on Auto Collision Repair (I-CAR) certification and possible graduation requirements.

### WHEN

The courses will be offered through the following sessions:

Session I (1 Credit)

June 5 – July 28

M-Th 7:30 – 11:30

F – 7:30 – 11:30 – Open Lab (optional)

Session II (1 Credit)

June 5 – July 28

M-Th 12:00 – 4:00

F – 12:00 – 4:00 – Open Lab (optional)

### WHY

- This is a great opportunity for students to get “hands on” training from industry professionals in the field of automotive collision.
- The classes are free, but students are required to purchase their I-CAR online course materials totaling \$50.00.
- This provides a way for students to fit a career related course into their busy academic schedules.
- This provides a great pathway to good paying, in demand, jobs.

Interested students should complete the attached application and submit it to their School Counselor by May 5<sup>th</sup>, 2017. Counselors will immediately submit all applications to the Franklin High School administration. Students will be notified by May 12<sup>th</sup> if they are accepted.

# WCS Digital Arts/Graphic Design

The sample academic plan below is to assist students interested in completing post-secondary opportunities toward a degree in Graphic Design. The Columbia State Community College Graphic Design Associate of Art or Associate of Science Degree is for students planning to complete a bachelor's degree at a four year school.

Columbia St. Graphic Design Required Course	Credit Hours	Opportunity for Credit
ENGL 1010 Composition I	3	CSCC Dual Enrollment or AP English Language score of 3 or higher
ENGL 1020 Composition II	3	CSCC Dual Enrollment or AP English Language core of 4 or higher
ARTP 2630 Intro to Digital Graphic Arts	3	CSCC Dual Credit – Digital Arts III
ARTP 1110 Two Dimensional Design	3	AP Studio Art 2D Design score of 3 or higher
ARTP 1120 Three Dimensional Design	3	AP Studio Art 3D Design score of 3 or higher
ARTH 2010 Survey of Art History I	3	AP Art History score of 3 or higher
ARTH 2020 Survey of Art History II	3	
COLS 101 Columbia St. College Success	1	
SPCH 1010 Fundamentals of Speech Communication/or SPCH 1030 Argumentation and Debate	3	
ARTP 1010 Drawing I	3	AP Studio Art Drawing score of 3 or higher
ARTP Elective (ARTP 2620 – Photography)	3	CSCC Dual Credit – Digital Arts III
ARTP Elective	3	
Mathematics Requirement	3	AP Calculus AB or AP Calculus BC score of 3 or higher
History Requirement (2 courses)	6	AP US History score of 3 or higher
Literature Requirement	3	
Natural Science Requirement (2 Courses)	8	CSCC Dual Credit Physical Science (PSCI 1030) or AP Biology, AP Chemistry, AP Physics with a score of 3 or higher
Social/Behavioral Science Requirement (2 Courses)	6	AP Macroeconomics or AP Microeconomics or US Government with a score of 3 or higher